

REMARKS:

The Office Action dated September 6, 2007, has been received and carefully reviewed. The preceding amendments and the following remarks form a full and complete response thereto. Claims 11-14 are added. Support for the amendments and new claims can be found at, inter alia, page 8 and Fig. 1, pages 11-12 and Fig 8, and pages 14-15 and Fig. 11 of the specification. No new matter is added. Accordingly, claims 8 and 10-14 are pending in the application and are submitted for reconsideration.

Claims 8 and 10 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,948,352 to Rabbett et al. ("Rabbett"). Applicants traverse the rejection and submit that claims 8 and 10 recite subject matter not disclosed by Rabbett.

In particular, claim 8 (upon which claim 10 depends) recites a proton conductor gas sensor that includes a sensor body having a membrane electrode assembly (MEA) comprising an electrolyte membrane, a sensing electrode, and a counter electrode, and a water reservoir positioned at one side of the sensor body and supplying water vapor to the membrane electrode assembly. The sensor also includes a cap body including a cap, a bottom plate, and filter material provided between the cap and the bottom plate. The cap has at least one first opening and the bottom plate has a second opening for introducing ambient atmosphere towards the MEA from an opposite side of the MEA to the water reservoir. The sensor also includes a thin nonporous, metal plate between the bottom plate and the membrane electrode assembly, having a diffusion control hole

connected to the second opening of the bottom plate and having a smaller diameter than that of the opening of the bottom plate.

Applicants respectfully submit that Rabbett does not disclose the configuration recited in claim 8. For example, Rabbett fails to disclose a thin nonporous, metal plate between the bottom plate of a cap body and the membrane electrode assembly, having a diffusion control hole *connected* to the opening of the bottom plate of the cap body and having a smaller diameter than that of the opening of the cap, as recited in claim 8 of the present application. In contrast, Rabbett discloses a cap 44 having an opening 48 and a bottom plate 16 having an opening 18, but does not disclose the thin nonporous, metal plate having a diffusion control hole connected to the opening in the bottom plate. See Fig. 6. Rabbett does disclose a diffusion layer 22, however the diffusion layer 22 does not include a diffusion control hole connected to the opening 18 of the plate 16 and having a smaller diameter than that of the opening 18 in plate 16. Further, Rabbett fails to disclose the claimed cap body, which includes a cap, a bottom plate, and filter material provided between the cap and the bottom plate. Thus, Rabbett fails to disclose each and every element of claim 8, upon which claim 10 depends. Accordingly, Applicants request that the rejection be withdrawn and claims 8 and 10-13, which depend thereon, be allowed.

Claim 14 is a new method claim that defines a process for assembling a sensor covered by claim 1, and therefore, is patentable for at least the same reasons set forth above.

In view of the above, all objections and rejections have been sufficiently addressed. Applicants submit that the application is now in condition for allowance and requests that claims 8 and 10-14 be allowed and this application passed to issue.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

Respectfully submitted,

By //Brian A. Tollefson//
Brian A. Tollefson
Attorney for Applicant
Registration No. 46,338
ROTHWELL, FIGG, ERNST & MANBECK
1425 K. Street, Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

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